

June 10, 2001

Mr. Jim Christiansen United States Environmental Protection Agency Region 8 999 18th Street - Suite 300 Denver, CO 80202-2466

Ref:

8EPR-SR

RE: Richardson Flat Monthly Status Report for May 2001.

Dear Mr. Christiansen:

This monthly Status Report details site activities conducted at Richardson Flat for the month of May 2001. Also included are the proposed site activities for the months of June and July.

Sampling Activities Conducted:

Surface water, soils and tailings were sampled during the week of May 7, 2001.

Surface Water sampling:

On May 7, 2001 the second round of monthly surface water sampling was conducted. Samples were collected at locations RF-8, RF7-2, RF6-2, RF5, RF4, RF3-2, RF2 and RF1. One duplicate sample was collected at location RF4. Samples were submitted to the laboratory on May 8, 2001.

Onsite Soils Cover Sampling:

Onsite soils cover sampling was conducted during the week of May 7, 2001. Soil samples were collected at forty-one locations.

Off-Site Soils Cover Sampling:

Off-site soils cover sampling was conducted during the week of May 7, 2001. Samples were collected at twenty-eight locations along three transects outside of the impoundment area.

Tailings Sampling:

Tailings sampling was conducted on May 9, 2001. Samples were collected from three test pits located within the tailings impoundment.

Delineation of Tailings South of the Diversion Ditch:

Delineation of tailings south of the diversion ditch was conducted during the week of May 7, 2001. The delineation was conducted by excavating fortynine test pits. The test pits were visually observed, no analytical samples were collected.

Background Soil Samples:

Background Soil Sampling was conducted on May 10, 2001. Eleven background soil samples were collected in the vicinity of the Site.

Monitoring Well Installation:

Silver Creek

Monitoring wells were installed on May 11 and May 29, 2001. One upgradient (RT-11) and one downgradient (RT-12) well were installed adjacent to Silver Creek outside of the impoundment. Prior to the installation of the these two monitoring wells a series of nine soil borings were completed to assess soil conditions in the vicinity of the two proposed monitoring well locations.

Impoundment

Three monitoring wells (RT-13, RT-14 and RT-15) were installed south of the diversion ditch. These wells replace the two piezometers detailed in the Sample and Analysis Plan. Prior to the installation of the three monitoring wells the soils and water levels in the vicinity of each monitoring well location were visually examined in a backhoe excavated test pit.

Surveying:

Sample locations and RT-14 were surveyed by GPS the week of May 14, 2001. Sample and Monitoring well locations are presented in Figure 1. Test Pits GL-40 through GL-49 and Monitoring Wells RT-11, RT-12, RT-15 and RT-13 locations have not been surveyed as of May 31, 2001, the locations currently detailed on Figure 1 are approximate.

Results:

Surface water sampling results are reported in Table 1, laboratory reports are located in Appendix A. Field data sheets and chain-of-custody forms can be found in Appendix B. Test pit, Monitoring well and soil boring logs can be found in Appendix C. An electronic copy of the AEC laboratory analytical report will be emailed to you and Jeff Montera. The Frontier Geosciences laboratory report for the low detection mercury results will not be emailed, however, these data are included in the summary table and a hard copy of the report is included in Appendix A.

Planned Activities: June 2001

- 1. Monthly surface and groundwater sampling will be conducted the week of June 4, 2001.
- 2. Test Pits GL-40 through GL-49 and Monitoring Wells RT-11, RT-12, RT-15 and RT-13 will be surveyed during the month of June, 2001

Planned Activities: July 2001

1. Monthly surface and groundwater sampling will be conducted the week of July 2, 2001.

If you should have any questions or comments, please contact me at 801-255-2626.

Best regards,

James R. Fricke

RMC

Attachment:

Figure 1, Sample Location Map

Table 1, Analytical Summary - Water Table 2, Analytical Summary - Soil

Cc: Jeff Montera
Kerry Gee
Kevin Murray
Muhammed Slam

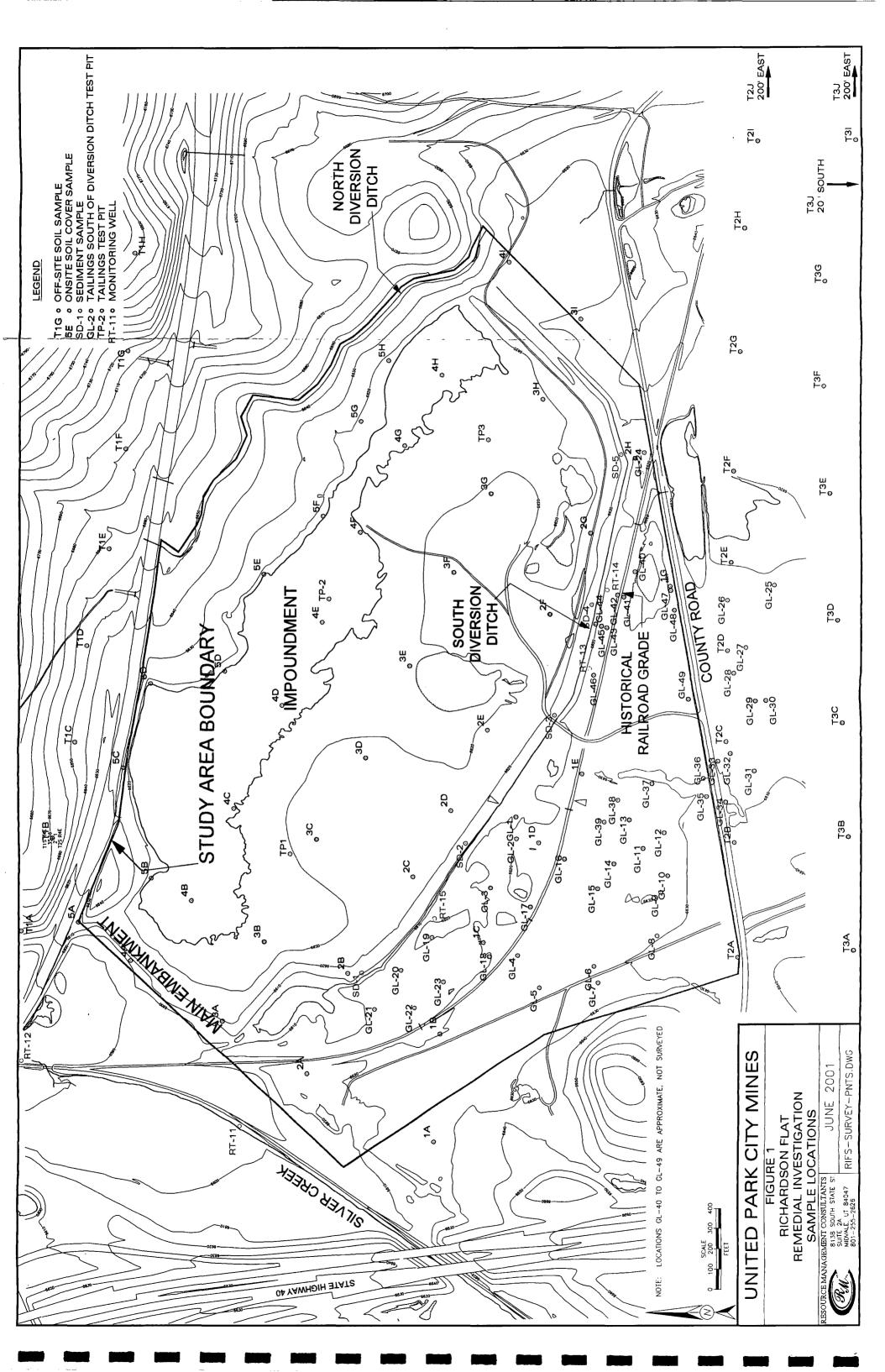


Table 1, Analytical Summary - Surface Water Data, Richardson Flat Remedial Investigation

units mg/l except where noted

	45	_			Γ	Γ	0 575		283	
ZWD)	-	3,	g	8	3,6	9	╁	+	╀	
	├	-	-	╀	╀	\vdash	╀	╀	-	\vdash
- 5	<u> </u>	88	8	8	\vdash	ł	8 8	,	╀	-
\$2	-	V	-	╀	\perp	\perp	╄	┼-	1	╀
P P		339	⊢	╀╌	+	+	+-	 -	╌	┼
800	-	78	-	╁		╁	+-	1-	╁	╁
SE(D)	_	V D0	200	80	ě	8	\$	Š	8	,00°
, w		800	7 00 ×	90	700 >	Š	8	700	90	800
SB(D)		88	010	015	y O	Š	\$	× 005	011	900
89		\$00,	S	912	, oo	ş	5	8	940	5
₹		0.80	83	<u> </u>	┺	1	 	-	2	2
P80	-	700	8	8	900	Ę	200	-	-	88
2	-	500	<u> </u>	L	_	ļ.,	╀-	⊢		⊢
	-	0	7	-	┼	╁╌	╁	╁╌	-	\vdash
	_	\vdash	\vdash	-	┢	H	\vdash	╁╴	\vdash	\vdash
N NOZ/NO3	_	23	L	Ļ	-	L	\vdash	 	L	L
NH3N		8	L	L	_	┞	\vdash	\vdash	-	L
Ž Š	-	8	37	-	1	┢	+-	┼		\vdash
(Q)	_	\$ × 905	-	<u> </u>	⊢	H	-	├	-	L
1	_	.013	750	<u> </u>	_	_	<u>_</u>	乚	L	
Y Y		4	3.0 16.	—	-			_	-	Ь.
오	¥	<u>-</u>					98.0	₩		ß
HG(b)		2	7	?	۵	ç	2	2	ŋ	Ş
Đ.		2	<2	₽	≎	٥	3	Ŋ	₽	ŋ
HCO3		121	183	\$		├	-	┥	-	琵
HARD		165	234	17	\vdash	814	 		\$	467.
FE(D)		\	\ -	<1	⊽	٧	_	⊽	<1	۲۷
- E	-	3 <1	52) <1	\$	2	7	11.	1 23	20
CMD		.016	.016	.020	.016	019	_	.017	.017	.016
3	_	210.	0.018	20.	710.	710.	710.	910.	020	610.
CR(D)	_	<.010	<.010	<.010	<.010	<.010	<.010	<.010	<.010	<.010
COND.		438.	657.	927.	1386.	1516.	1508	1378.	1587.	1495.
క		<.010	<.010	<.010	<.010	<.010	<.010	<.010	<.010	<.010
8		٧	۷	8.0	₽	₽	₽	₽	٧	₽
ठं		8	83	212.	8	.22	86	Ľ,	, 38	24.
(Q)Q)		<.001	<.001	<.001	<.001	<.001	<.00	<.001	900	.004
8	_	, 00.	× 001	× 00.	.001	< 001	<.001	8	90	900
CAT/ AN BAL		8	+1.2	-2.3	42	-3.5	-5.5	-3.0	0.4	-1.2
5	\downarrow	5.	5 67.	.89	5 200.	5 240.	5 215.	5 201.	5 126.	5 135.
AS(D)	_	, 005	\$ < 005	010	×.005	5 < 005	<.005	\$ <.005	\$ × 005	<,005
\$ 2	_	×.005	\$ \$	710.	900	< 000	8	\$ <.005	×.006	\$ 00°
D) ALK	-	50 121	56 183	50 117	98 28	259	220	255	50 145	8 5
AL(D)	_	090'>	\$ \$	050°v	090°	050.>	050.>	2 <.050	×.060	050.>
D) AL	-	970.	35	× 050	oso < 050	> 050	× 050	25	5	× 050
AG(D)		× 005	× 005	× 005	× × × × × × × × × × × × × × × × × × ×	200°	> 005	× × 0005	×.005	\$00°
γ	+	× 005	× 005	× 995	× 005	×.005	×.005	× 005	\$6 8	\$0°
3		W-RF1	W-RF2	W-RF3-2	V-RF4	V-RF5	W-RF6-2	W-RF504	W-RF7-2	W-RF8
Sample #	-	STAN RF-SW-RF1	57.01 RF-SW-RF2	57/01 RF-SW-RF3-2	5/7/01 RF-SW-RF4	5/7/01 RF-SW-RF5	5/7/01 RF-SW-RF6-2	5/7/01 RF-SW-RF504	5/7/01 RF-SW-RF7-2	S7701 RF-SW-RF8
Date		STA	\$705	STA	277	<i>\$11.</i> 8	<i>\$11</i>	\$77.	STA	200
		010626-001	L010626-002	L010626-003	1010626-004	1010626-005	010626-006	1010626-007	L010626-008	L010626-009
9		1010	010	1010	1010	1010	L010	1010	101	101

Table 2, Analytical Summary - Soil Data, Richardson Flat Remedial Investigation

units mg/l

	Γ.			Ι.	Ι.	Ι.	Ι.				٠.						_	Γ.		Γ.	Γ.			Ι.						Γ
ž	9	8	65.	74.	101	47	52.	72.	79.	107	1010	125	933	62	209	152	1800	111	172	651	165	102	270	276.	65	165	127	96	90	125
SE	\$	\$	\$	\$	Ą,	Ą,	Ą.	\$	Ŝ	Ŝ	\$	\$	\$	ŝ	\$	\$ 5	\$	\$	\$	\$	δ.	\$	\$	\$	5	5	\$	\$	\$	ų
8	17.	20.	21.	18.	33.	14.	16.	24.	34	62	875.	42.	555.	16.	127.	.99	1070.	33.	83	515.	73	84	194	189.	19	92.	84.	33.	28.	cg
욷	₹	<u>-</u> ,	V	<u>۲</u>	۲.	<u>۲</u>	ī	Į,	۱ ۰	<u>.</u>	7.	V	3.0	ە.10	×.10	11.	3.2	v.10	.2	4.	-	v	×.10	×.10	×.10	o.10	.15	×.10	×.10	45
D3	14.	19	29.	27.	26.	20.	19.	25.	22.	26.	66	32.	67.	13.	25.	8.	112.	35.	28.	<u>~</u>	35.	23.	0	38	29.	25.	29.	16.	15.	22
CR	23.	16.	16.	22.	33.	20.	21.	21.	30.	31.	24.	23.	20.	22.	20.	21.	21.	21.	24.	24.	20.	22.	21.	21.	22.	21.	20.	22.	23.	22
СD	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	1.	9	-	16.	<0.5	1.	1.	43.	1.	1.	ن	1.	<0.5	1.	2.	<0.5	1.	1.	<0.5	<0.5	-
ВА	208.	221.	216.	327.	175.	356.	365.	198.	305	301.	210.	413.	215.	204.	187.	383.	236.	407.	240.	255.	409.	238.	218.	233.	246.	188.	265.	227.	213.	100
AS	<5.	6.	6.	9	S.	\$,	\$	9	7.	6	49.	7.	27.	<5.	9.	8.	47.	7.	12.	46.	8.	8.	15.	16.	.9	9.	14.	7.	7.	α
PAG	<5.	<5.	<5.	·\$>	\$.	<5.	\$	~ 5	·\$>	<5.	<5.	<5.	·\$>	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	<5.	5>
Sample #	5/8/01 RF-ON-2H 0-2"	5/8/01 RF-ON-4F 0-2"	5/8/01 RF-ON-4F50 0-2"	5/8/01 RF-ON-4D 0-2"	5/8/01 RF-ON-5D 0-2"	5/8/01 RF-ON-3E 0-2"	5/8/01 RF-ON-3E50 0-2"	5/8/01 RF-ON-5B 0-2"	5/9/01 RF-OF-T2H 1-6"	5/9/01 RF-OF-T2H 0-2"	5/8/01 RF-ON-3A 0-2"	5/9/01 RF-OF-T3D 1-6"	5/9/01 RF-OF-T3B 1-6"	5/8/01 RF-ON-2H50 0-2"	5/8/01 RF-ON-31 0-2"	RF-OF-T350D 0-2"	5/9/01 RF-OF-T3B 0-2"	5/9/01 RF-OF-T3D 1-6"	RF-ON-4C 0-2"	5/9/01 RF-ON-3D 0-2"	5/9/01 RF-OF-T3D 0-2"	5/9/01 RF-OF-T250F 1-6"	5/9/01 RF-OF-T2F 0-2"	5/9/01 RF-OF-T250F 0-2"	5/9/01 RF-OF-T2F 1-6"	5/10/01 RF-OF-T1C 1-6"	5/10/01 RF-BG-BG8 0-2"	5/10/01 RF-BG-BG10	5/10/01 RF-BG-BG1050	5/10/01 RF-OF-T1C 0-2"
Date	5/8/01	5/8/01	5/8/01	5/8/01	5/8/01	5/8/01	5/8/01	5/8/01	5/9/01	5/9/01	5/8/01	5/9/01	5/9/01	5/8/01	5/8/01	5/9/01	5/9/01	5/9/01	5/8/01	5/9/01	5/9/01	5/9/01	5/9/01	5/9/01	5/9/01	5/10/01	5/10/01	5/10/01	5/10/01	5/10/01
Lab#	L010671-001	L010671-002	L010671-003	L010671-004	L010671-005	L010671-006	L010671-007	L010671-008	L010671-009	L010671-010	L010671-011	L010671-012	L010671-013	L010671-014	L010671-015	L010671-016	L010671-017	L010671-018	L010671-019	L010671-020	L010671-021	L010671-022	L010671-023	L010671-024	L010671-025	L010671-026	L010671-027	L010671-028	L010671-029	11 010671-030

TARGET SHEET

EPA REGION VIII

SUPERFUND DOCUMENT MANAGEMENT SYSTEM

DOCUMENT NUMBER: 2008734

SITE NAME: RICHARDSON FLAT TAILINGS
DOCUMENT DATE: 06/10/2001
DOCUMENT NOT SCANNED Due to one of the following reasons:
☐ PHOTOGRAPHS
☐ 3-DIMENSIONAL
□ OVERSIZED
☐ AUDIO/VISUAL
□ PERMANENTLY BOUND DOCUMENTS
□ POOR LEGIBILITY
□ OTHER
□ NOT AVAILABLE
☑ TYPES OF DOCUMENTS NOT TO BE SCANNED (Data Packages, Data Validation, Sampling Data, CBI, Chain of Custody)
DOCUMENT DESCRIPTION:
APPENDIX A Laboratory Reports APPENDIX B Field Data Sheets APPENDIX C Test Pit Logs, Soil Boring Logs, Monitoring Well Logs